



Grease-II Workshop

Geo-aware advertisement selection

Bruno Martins

Universidade Técnica de Lisboa, Instituto Superior Técnico,
Departamento de Engenharia Informática

bruno.g.martins@ist.utl.pt

GREASE-II

- Core challenge is in Geographic Information Retrieval
- Task: *Geographic summaries of documents*
 - Summarizing the geographic scopes of documents
- Task: *Geographic similarity for searches*
 - Measuring the similarity between these summaries

Geo-Aware Advertisement

- **Online advertisement** is a relevant **Geo-IR problem** involving aspects from the previously described tasks
 - Summarizing the geographic scopes of both the ads and the Web pages where they are to be displayed
 - Measuring the similarity between the ads and the Web pages where they are to be displayed (*thematic and geographic similarity*)
 - Comparing different approaches for both tasks, and see if their usage results in a better advertisement selection

Proposed work

- Focus on the similarity between ads and documents
 - Web pages and ads are both assigned to the corresponding bounding boxes
 - Experiment with the similarity approach proposed by Larson & Frontiera
 - Address the combination of thematic/geographic similarity
 - Explore the functionalities of a relational database for textual/geographical retrieval
- Reuse previous work for generating the *summaries*
 - Apply the CaGE system over the text of the documents and the ads
 - Yahoo! Web services for extracting important terms from the documents
 - Metacarta and Sapo Web services for geoparsing and geocoding text
 - LingPipe Java API + Yahoo! Geocoder for geoparsing and geocoding text
- Evaluate proposed GIR ad-placement approach versus
 - Standard techniques for placing ads, i.e. keyword-based methods
 - Geographic ad-placement approaches based on geocoding though IP addresses

Results so far

- *Work in progress in the context of a MSc thesis*
 - Prototype system for managing advertisement campaigns
 - Using MySQL for storing and retrieving the ads
 - Using Google Maps API for manual assignment of scopes
 - Datasets for experimenting with geographic ad retrieval
 - ChefMoz collection (restaurants and the corresponding locations)
 - Websites from DMOZ (regional part of the directory)
 - Initial tests with a dataset for geo-referencing IP addresses
 - Survey on approaches for online advertisement

Demonstration

Tese2008

HomeMy AccountMy CampaignsMy WebsitesLog Out

My Campaigns / campanha1

Delete this Campaign
New Ad

ID	Headline	Details
1	Compre um Carro	see more
2	barcos baratos	see more

Name
campanha1

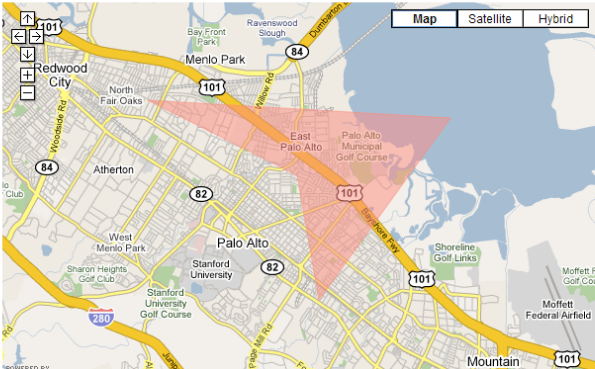
Target customers by language
Portuguese

Start Date
18 August 2009

End Date
18 August 2010

Update

save
clear



Tese2008

HomeMy AccountMy CampaignsMy WebsitesLog Out

My Websites / example

Delete this Website

Name
example

Format
468 x 60 Banner

Title color
0000cc

Text color
000000

URL color
008000

Update

Code

```
<script type="text/javascript">!--  
ad_client = "1";  
//-->  
</script>  
<script type="text/javascript"  
src="http://localhost:3000/javascripts/adscript.js">  
</script>
```

New keyword
Add

Keywords
sports cars x
cars x
auto x

January 09

6